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=> s (early pregnancy factor?) or (early conception factor?)

316876 EARLY

75852 PREGNANCY

1220359 FACTOR?

130 EARLY PREGNANCY FACTOR?

(EARLY (W) PREGNANCY (W) FACTOR?)

316876 EARLY

7251 CONCEPTION

1220359 FACTOR?

2 EARLY CONCEPTION FACTOR?

(EARLY (W) CONCEPTION (W) FACTOR?)

L1 132 (EARLY PREGNANCY FACTOR?) OR (EARLY CONCEPTION FACTOR?)

=> s l1 and antibod?

365755 ANTIBOD?

L2 32 L1 AND ANTIBOD?

=> d ti ab 1-32

L2 ANSWER 1 OF 32 CA COPYRIGHT 2003 ACS

TI Bovine pregnancy test

AB This invention provides bovine pregnancy test methods and devices. The test is also suitable for other ruminant and/or ungulate animals. Antigens from Group A (early pregnancy antigens), and/or Group B (mid-pregnancy antigens), and Group C (early, mid- and late pregnancy antigens) are detected in a fluid from the animal, and pregnancy is reliably detd. The pregnancy assays of this invention are preferably carried out using immunoassay devices which provide immediate results in the field.

L2 ANSWER 2 OF 32 CA COPYRIGHT 2003 ACS

TI ***Early*** ***pregnancy*** ***factor*** peptides assays and therapeutic uses

AB The present invention provides assays for the study of the interaction of ***early*** ***pregnancy*** ***factor*** (EPF) and EPF-related peptides with human dorsal root receptors (hDRR) -4 and -7. The assays are useful to identify whether a test compd. can bind to the hDRR under conditions in which EPF or related peptide can bind to the receptor and to det. whether the test compd. is an agonist or antagonist of hDRRs. Pharmaceutical compns. contg. the hDRRs agonists and antagonists, as well as ***antibodies*** of an hDRR binding fragment are also claimed. Addnl. claimed are hDRRs disorders diagnosis methods and methods to detect and isolate hDRR from cells and membrane preps. and to identify and obtain a test compd. capable of modulating the activity of hDRRs. The uses of EPF-related peptides and compds. identified by the assays in pharmaceutical compds. to serve as contraceptives or in treatment of certain diseases like cancer and autoimmune disease are claimed.

L2 ANSWER 3 OF 32 CA COPYRIGHT 2003 ACS

TI Immunoelectron microscopy provides evidence for the presence of mitochondrial heat shock 10-kDa protein (chaperonin 10) in red blood cells and a variety of secretory granules

AB Hsp10 (10-kDa heat shock protein, also known as chaperonin 10 or Cpn10) is a co-chaperone for Hsp60 in the protein folding process. This protein has also been shown to be identical to the ***early*** ***pregnancy*** ***factor***, which is an immunosuppressive growth factor found in maternal serum. In this study we have used immunogold electron microscopy to study the subcellular localization of Hsp10 in rat tissues sections embedded in LR Gold resin employing polyclonal ***antibodies*** raised against different regions of human Hsp10. In all rat tissues examd. including liver, heart, pancreas, kidney, anterior pituitary, salivary gland, thyroid, and adrenal gland, ***antibodies*** to Hsp10 showed strong labeling of mitochondria. However, in a no. of tissues, in addn. to the mitochondrial labeling, strong and highly specific labeling with the Hsp10 ***antibodies*** was also obsd. in several extramitochondrial compartments. These sites included zymogen granules in pancreatic acinar cells, growth hormone granules in anterior pituitary, and secretory granules in PP pancreatic islet cells. Addnl., the mature red blood cells which lack mitochondria, also showed strong reactivity with the Hsp10 ***antibodies***. The obsd. labeling with the Hsp10 ***antibodies***, both within mitochondria as well as in other compartments/cells, was abolished upon omission of the primary ***antibodies*** or upon preadsorption of the primary ***antibodies*** with the purified recombinant human Hsp10. These results provide evidence that similar to a no. of other recently described mitochondrial proteins (viz., Hsp60, tumor necrosis factor receptor-assocd. protein-1, P32 (gClq-R) protein, and cytochrome c), Hsp10 is also found at a variety of specific extramitochondrial sites in normal rat tissue. These results raise important questions as to how these mitochondrial proteins are translocated to other compartments and their possible function(s) at these sites. The presence of these proteins at extramitochondrial sites in normal tissues has important implications concerning the role of mitochondria in apoptosis and genetic diseases.

L2 ANSWER 4 OF 32 CA COPYRIGHT 2003 ACS
TI Isolation of ***antibodies*** which neutralize the activity of
early ***pregnancy*** ***factor***
AB ***Early*** ***pregnancy*** ***factor*** (EPF) is a secreted protein with growth regulatory and immunomodulatory properties. It functions as an autocrine growth factor for tumor cells and as an autocrine or paracrine growth factor for regenerating normal cells. Anti-EPF ***antibodies*** have demonstrable anti-tumor activity and, as a result, hybridomas which produce such ***antibodies*** are unstable. In this study, the phage display ***antibody*** techniques have been investigated as a means of producing recombinant anti-EPF ***antibodies***. Mice were immunized with synthetic peptides which correspond to the N or C terminal regions of EPF, and their splenic tissue was used to make combinatorial ***antibody*** libraries. The Fab repertoire was displayed on the surface of phage and panned over recombinant EPF. Reactive Fabs were identified by ELISA and their binding was characterized by BIAcore anal. and functional studies. Three libraries with a size of greater than 5.times.10⁷ cfu were constructed and a total of 26 unique Fabs with specific reactivity against EPF were identified. Three Fabs were purified and of these one demonstrated strong EPF neutralizing activity, one had intermediate activity and the other was not neutralizing. Phage display has provided the means of circumventing the problems of anti-EPF hybridoma development and has resulted in the prodn. of ***antibodies*** with potential applications in the diagnosis of pregnancy and the diagnosis and therapy of cancer.

L2 ANSWER 5 OF 32 CA COPYRIGHT 2003 ACS
TI Antagonists of chaperonin 10
AB An antagonist to, or an ***antibody*** (Ab) raised against, cpn10 or a recombinant cpn10 with the sequence: GSAGQAFRKFLPLFDRVLVERSAETVTKGGIMLPEK SQGKVLQATVEAVGSGSKGKGGEIQVSVKEGDKVLLPEYGGTKVVLDDKDYFLFRDGDILGKYVD is claimed. Also, claimed are: (1) an antagonist or Ab raised against a peptide derived from cpn10, or a peptide with the sequence: Ac-AGQAFRKFLPL(C), AGQAFRKFLPLA2, A1AGQAFRKFLPL, Ac-A1AGQAFRKFLPL, (A1)EKSQGKVLQATA2, and A1EKSQGKVLQAT where A1 and A2 are amino acid sequences that may be added to one or both ends of the peptides, and where the peptides may have a single amino acid deletion, addn. or substitution; (2) suppressing cellular growth or enhancing immunol. activity by administration of a cpn10 antagonist or anti-cpn10 Ab to a subject; and (3) an assay for measuring anti-cpn10 Ab in a sample by: (a) reacting purified cpn10 with the sample (b) detg. the amt. of Ab in the sample by detg. the binding between the Ab and cpn10. The cpn10 antagonist or Ab can be used to terminate pregnancy, suppressing tumor cell growth or enhancing the immune system.

L2 ANSWER 6 OF 32 CA COPYRIGHT 2003 ACS
TI Preparation and characterization of polyclonal ***antibodies*** against human chaperonin 10
AB ***Early*** ***pregnancy*** ***factor*** (EPF) has been identified as an extracellular homolog of chaperonin 10 (Cpn10), a heat shock protein that functions within the cell as a mol. chaperone. Here, we report the prodn. of polyclonal ***antibodies*** directed against several different regions of the human Cpn10 mol. and their application to specific protein quantitation and localization techniques. These ***antibodies*** will be valuable tools in further studies to elucidate the mechanisms underlying the differential spatial and temporal localization of EPF and Cpn10 and in studies to elucidate structure and function.

L2 ANSWER 7 OF 32 CA COPYRIGHT 2003 ACS
TI Method and apparatus for detecting conception in animals using
antibodies to ***early*** ***conception*** ***factor***
AB The present invention provides ***antibodies*** which specifically

bind ***early*** ***conception*** ***factor*** , which can be found in body fluids of animals including but not limited to the cow, cat, dog, horse, human, sheep, and pig. The invention provides methods for detecting conception or the absence of conception in an animal, the latter being recognized by the absence of ***early*** ***conception*** ***factor*** in a suitable body fluid collected from the animal. Apparatus for detecting ***early*** ***conception*** ***factor*** in a body fluid from an animal comprising the ***antibodies*** which specifically bind ***early*** ***conception*** ***factor*** are also provided.

L2 ANSWER 8 OF 32 CA COPYRIGHT 2003 ACS

TI Application of anti-bovine CD2 monoclonal ***antibody*** to the rosette inhibition test for detection of ***early*** ***pregnancy*** ***factor*** in cattle

AB To reliably detect ***early*** ***pregnancy*** ***factor*** (EPF) in cattle, monoclonal ***antibody*** specific for bovine CD2 mol., which is the sheep red blood cell (SRBC) receptor on bovine T cell surface, was applied to the rosette inhibition test. The rosette inhibition titers (RITs) were higher in pooled sera from early pregnant cattle than in those of non-pregnant cattle using 2 anti-bovine CD2 monoclonal ***antibodies***, B26A4 and BAQ95A. The dissocn. value of RITs between pregnancy and non-pregnancy with B26A4 was greater than that with BAQ95A. The B26A4 monoclonal ***antibody*** was therefore applied to the rosette inhibition test in subsequent expts. The RITs in serum of individual pregnant and non-pregnant cows 8 days after estrus were different by .gtoreq.3 dilns. When the rosette inhibition test was carried out in sera from individual pregnant and non-pregnant cows at estrus and at 24, 72, and 168 h after ovulation, the RITs of pregnancy sera increased at 24 h after ovulation as compared with non-pregnancy sera. Thus, anti-bovine CD2 monoclonal ***antibody*** can be utilized with the rosette inhibition test to detect EPF in cattle, and this assay detects bovine EPF in pregnancy serum at 24 h after ovulation.

L2 ANSWER 9 OF 32 CA COPYRIGHT 2003 ACS

TI Chaperonin 10

AB A process was developed for the detection of Chaperonin 10 (cpn10) in serum or other biol. fluids. The method involves several steps: (i) raising ***antibody*** to cpn10; (ii) reacting said ***antibody*** with a sample of biol. fluid suspected of contg. cpn10; and (iii) detecting the presence of cpn10 in said sample by a signal amplification resulting from prodn. of a cpn10- ***antibody*** complex. Cpn10 was discovered to be ***early*** ***pregnancy*** ***factor***. Human cpn10 cDNA was cloned and expressed in E. coli. Recombinant cpn10 had the sequence GSAGQAFRKFLLPLFDRVLVERSAETVTKGGIMLPEKSQGVLLQATEVAVGSGSGKGGGEIQPVSVKEGDKVLLPEYGGTKVVLDDKDYFLFRDGDILGKYVD. Studies showed the beneficial effects of treatment with recombinant cpn10, including effects on allogenic skin grafts, wound healing, tissue repair, autoimmune disease, and infertility. Residues 1-11 and 34-44 in rat and human cpn10 were shown to be responsible for biol. activity. Various cpn10-derived peptides were synthesized and used to induce ***antibodies*** in rabbits. Neutralization of cpn10 in pregnancy serum by the ***antibodies*** adversely affected embryonic viability in the early stages of pregnancy.

L2 ANSWER 10 OF 32 CA COPYRIGHT 2003 ACS

TI Preparation of the monoclonal ***antibodies*** against human ***early*** ***pregnancy*** ***factor***

AB In the present study, the authors report two hybridoma cell lines (1B6, 2F10) secreting monoclonal ***antibodies*** (McAbs). McAbs 1B6 and 2F10 were IgG1 and the no. of chromosomes of 2 hybridoma cell lines (1B6, 2F10) ranged from 100-106. The titer of the EPF McAbs in the ascites was 1:128,000 by ELISA. These McAbs against human EPF may be useful tools for

studying the biol. properties and function of human EPF.

L2 ANSWER 11 OF 32 CA COPYRIGHT 2003 ACS

TI ***Early*** ***pregnancy*** ***factor*** in liver regeneration
after partial hepatectomy in rats: Relationship with chaperonin 10
AB ***Early*** ***pregnancy*** ***factor*** is not only a product
of dividing embryonic and neoplastic cells, as demonstrated previously,
but also of normal proliferating cells. Eight hours after partial
hepatectomy in rats, ***early*** ***pregnancy*** ***factor***
was detected in serum. It rose to a peak by 48 h. Neutralization of
early ***pregnancy*** ***factor*** in vivo by passive
immunization with specific ***antibodies***, 18 h after partial
hepatectomy, resulted in a decrease in the uptake of [3H]thymidine by the
liver remnant, measured 4-6 h later. Thus, during liver regeneration,
early ***pregnancy*** ***factor*** is essential to the
sequence of events that culminates in DNA synthesis and cell division.
Recently the authors purified ***early*** ***pregnancy***
factor from human platelets and detd. by mass spectrometry a
precise mol. mass of 10,843 Da. Amino acid sequencing (.apprx.72% of the
mol.) demonstrated that ***early*** ***pregnancy*** ***factor***
is highly homologous with chaperonin 10, a stress-inducible mitochondrial
protein, and that platelet-derived ***early*** ***pregnancy***
factor and rat chaperonin 10 share similar biochem. and immunol.
properties. Here the authors show that ***early*** ***pregnancy***
factor, purified from regenerating rat liver and from serum taken
24 h after hepatectomy, shares these properties. In addn.,
antibodies to ***early*** ***pregnancy*** ***factor***
, effective in passive immunization studies, recognize chaperonin 10,
whereas chaperonin 10 ***antibodies*** bind to ***early***
pregnancy ***factor*** from regenerating liver and
posthepatectomy serum. The authors propose that ***early***
pregnancy ***factor*** /chaperonin 10 is selectively released
from proliferating cells and, in an autocrine or paracrine mode (or both)
is involved in DNA synthesis.

L2 ANSWER 12 OF 32 CA COPYRIGHT 2003 ACS

TI The purification of ***early*** - ***pregnancy*** ***factor***
to homogeneity from human platelets and identification as chaperonin 10
AB ***Early*** - ***pregnancy*** ***factor*** (EPF), first
discovered in the early stages of gestation, is assocd. with and necessary
for cell proliferation in a wide variety of biol. situations. Like many
other growth factors, EPF is present in platelets, and, by titrn. studies
with a neutralizing anti-EPF monoclonal ***antibody***, platelets were
identified as an extremely rich source of this growth factor. EPF has
been purified from clin. outdated human platelets by heat extn.,
ion-exchange and affinity chromatogs. on SP-Sephadex and heparin-Sepharose
resp., high-performance hydrophobic interaction chromatog. and three
reverse-phase HPLC steps, with an av. yield of 15 .mu.g/100 platelet units
(equiv. to .apprx. 50 L blood). Using SDS-PAGE, EPF migrated as a
single band with approx. Mr 8500, coincident with biol. activity. Mass
spectrometry provided an accurate and precise detn. of the mol. mass as Mr
10843.5, along with definitive evidence of the homogeneity of the prepn.
Attempts at Edman degrdn. indicated that the mol. was blocked at the
N-terminus and sequencing of proteolytic fragments was undertaken. The
amino acid sequence of approx. 70% of the mol. was detd. which, with a
single exception, is identical with rat chaperonin 10. This structural
relation was shown to extend to functional identity by studies using
chaperonin 10 and its functional assoc. chaperonin 60. Investigations
with the latter confirmed that chaperonin 10 is the moiety in pregnancy
serum which initiates response in the EPF bioassay. The authors' studies
identify EPF as a member of the highly conserved heat-shock family of
mols. and demonstrate a mol. chaperone performing an extracellular role.

L2 ANSWER 13 OF 32 CA COPYRIGHT 2003 ACS
TI Study of ***early*** ***pregnancy*** ***factor*** (EPF). 2
AB A review, with 117 refs., on the prepn. of polyclonal and monoclonal
antibodies specific for EPF for EIA, and hypotheses on the prodn.
and action mechanism of EPF.

L2 ANSWER 14 OF 32 CA COPYRIGHT 2003 ACS
TI Detection of bovine ***early*** ***pregnancy*** ***factor***
(EPF) active polypeptide in different species of mammals
AB The authors studied the cross-reactivity between bovine ***early***
pregnancy ***factor*** (EPF) and components in serum from
females of 47 species by a monoclonal ***antibody*** (mab) capable of
recognizing the EPF-active polypeptide in cattle to obtain data on the
occurrence of an EPF system in mammals. Sera from 22 species were found
to contain antigens that cross-reacted with mab against bovine EPF. They
included 12 species of Bovidae, 4 of Cervidae, 1 Camelidae, 1 Suidae, 1
Rhinocerotidae, 1 Tapiridae, and 2 Equidae. No cross-reactive antigens
were found in 2 species of Felidae, 3 of Ursidae, 1 of Elephantidae, and 1
of Hominidae. These results indicate the presence of the bovine
EPF-active mol. in mammals other than Bovidae and support the assumption
that EPF represents an early system in phylogenesis.

L2 ANSWER 15 OF 32 CA COPYRIGHT 2003 ACS
TI Bovine ***early*** ***pregnancy*** ***factor*** : its
characterization and an attempt to produce anti-bovine EPF
antibody
AB In a previous study, the authors suggested that bovine EPF had a mol. wt.
of 21.5 kDa because a 21.5 kDa polypeptide was not found in the
nonpregnant serum, and the isoelec. point was near 5.0 by 2D SDS-PAGE
using non-equil. pH gradient electrophoresis. The authors extended the
study to characterize the biochem. nature of purified bovine EPF. As a
result, the isoelec. point of bovine EPF turned out to be 6.3 by 2D
SDS-PAGE using isoelec. focusing. Also, the purified EPF was not reduced
by the addn. of 2-mercaptoethanol, indicating that bovine EPF is a
monomeric peptide. Amino acid anal. of EPF was attempted, but a
definitive sequence could not be confirmed. In the present study, the
crude anti-EPF IgG fraction was purified by adsorption with CNBr-activated
Sephrose 4B coupled with nonpregnant bovine whole serum. The purified
anti-EPF IgG decreased the rosette inhibition titer of pregnant serum from
6 to 3. The Sepharose 4B affinity column coupled with anti EPF-IgG
effectively isolated the EPF from pregnant bovine serum.

L2 ANSWER 16 OF 32 CA COPYRIGHT 2003 ACS
TI Effect of monoclonal ***antibodies*** to ***early***
pregnancy ***factor*** (EPF) on the in vivo growth of
transplantable murine tumors. [Erratum to document cited in
CA116(23):233475n]
AB Errors in Table 1 have been cor. The errors were not reflected in the
abstr. or the index entries.

L2 ANSWER 17 OF 32 CA COPYRIGHT 2003 ACS
TI ***Early*** ***pregnancy*** ***factor*** has immunosuppressive
and growth factor properties
AB A review with 49 refs. ***Early*** ***pregnancy*** ***factor***
(EPF) was first described as a pregnancy-assocd. substance, although
recent studies suggest a more general link with cell development. It is a
product of actively dividing cells, and its apparent functional importance
to them suggests its potential as a regulator of cell proliferation. The
recent discovery of EPF in platelets has provided a comparatively rich and
readily available source of EPF. The purifn. procedures employed to
isolate EPF from this source have also been applied to pregnancy serum and
urine, medium conditioned by estrous mouse ovaries (stimulated with
prolactin and embryo-conditioned medium), medium conditioned by tumor

cells, and serum from rats 24 h after partial hepatectomy (PH). In all instances, biol. activity followed the same pattern throughout. Furthermore, the final active reversed-phase high-performance liq. chromatog. fraction from all sources was bound specifically by immobilized anti-EPF monoclonal ***antibodies*** (MAbs), indicating that the active fractions produced from these diverse sources are very closely related, of not identical. Some differences have been obsd. in the behavior of EPF in various conditions. EPF is produced by proliferating tumor cells and by liver cells post-PH, and passive immunization studies with anti-EPF MAbs have shown that these cells need EPF for survival. In contrast, EPF has not been detected as a product of the pre-embryo, and addn. of anti-EPF MAbs to embryo cultures does not adversely affect development from the 2-cell to the blastocyst stage. Although the pre-embryo is not dependent on EPF for its development in vitro, neutralization of EPF in vivo by anti-EPF MAbs retards its development. Thus, EPF appears to play an indirect role in maintaining the pre-embryo. By virtue of its ability to suppress the delayed-type hypersensitivity reaction, it has been suggested that EPF might act as an immunol. response modifier of the maternal immune system. Alternatively, the effect of EPF on lymphocytes may be to reduce the expression of all or some cytokines, and this could inhibit development. Whether or not EPF acts more directly as an autocrine growth factor from around the time of implantation, when the embryo first begins synthesis of EPF, is not known and remains to be investigated.

L2 ANSWER 18 OF 32 CA COPYRIGHT 2003 ACS

TI Effect of monoclonal ***antibodies*** to ***early***
 pregnancy ***factor*** (EPF) on the in vivo growth of
 transplantable murine tumors

AB Neutralization studies with monoclonal ***antibodies*** (mAbs)
 specific for ***early*** ***pregnancy*** ***factor*** (EPF)
 have shown the factor to be essential for the continuation of pregnancy in mice and the growth of some tumor cells in vitro. These studies report that the mAbs are also able to limit the growth of 2 murine tumor lines transplanted s.c. The development of MCA-2 tumors in CBA mice was unaffected by the injection of 1 mg anti-EPF IgM at the time of tumor cell inoculation. However, 4 doses of 500 .mu.g anti-EPF, injected one dose per day for 4 days after tumor cell inoculation, retarded tumor development such that no tumors were palpable on day 13. A similar dose regimen of control IgM had no effect on tumor size. Dose/response studies revealed that lower doses of anti-EPF administered after tumor cell inoculation were effective in retarding the growth of the MCA-2 tumors. The effect of anti-EPF mAb administration on the growth rate of palpable B16 tumors established s.c. in C57BL/6 mice was also detd. Tumors injected with 6 mg anti-EPF 5/341 or anti-EPF 5/333 mAbs showed a decrease in the uptake of [3H]thymidine into tumor tissue, measured 16 h after injection. Furthermore, titrn. of sera for active EPF showed that a redn. in the EPF titer was assocd. with an inhibition of tumor DnA synthesis. Thus, it appears that neutralization of EPF retards tumor growth both in in vitro and in vivo. In vitro the effects must be due to anti-EPF mAb interfering with a direct mechanism that contributes to the maintenance of cells in the active growing phase. However, in vivo host immunol. mechanism that are modified to allow tumor survival may also be affected. The presence of EPF-induced suppressor factors circulating in the serum of tumor-bearing mice has been confirmed and the contribution of such factors to tumor progression must now be investigated.

L2 ANSWER 19 OF 32 CA COPYRIGHT 2003 ACS

TI Relationship between ***early*** ***pregnancy*** ***factor*** ,
 mouse embryo-conditioned medium and platelet-activating factor
 AB The effects of synthetic platelet-activating factor (PAF-acether) and
 mouse embryo-conditioned medium (a source of embryo-derived PAF (EPAF)) on
 prodn. of ***early*** ***pregnancy*** ***factor*** (EPF) were

compared. Embryo-conditioned medium, itself inactive in the EPF bioassay, stimulated ovarian prodn. of EPF in vitro but PAF-acether did not. In vivo, embryo-conditioned medium induced EPF activity in serum of estrous female, but not in male and female mice. This PAF-induced activity was transitory, declining by 2 h and disappearing by 3 h after injection. Activity induced by embryo-conditioned medium was 1st evident at 2 h after injection, serum concns. increasing up to 6 h after injection. By discriminating between the behavior of PAF-acether and EPAF, these studies reinforce the conclusions of other workers that the mol. produced by the embryo is not PAF. Further investigations into the mechanism of action of PAF-acether revealed that it is a potent inducer of activity in the EPF bioassay, with an abs. requirement for platelets in the spleen cell suspension used in the assay. This platelet-derived active species was bound specifically by an anti-EPF monoclonal ***antibody***, indicating that it is EPF-like. This is consistent with parallel studies showing the platelets are not required for induction of activity by either pregnancy serum or purified EPF. These studies were applied to the PAF-induced leukotriene-like species, which had been found by others to be active in the EPF bioassay. Pregnancy serum induced the appearance of this substance from the spleen cell suspension used in the assay; thus the leukotriene-like substance may be regarded as an effector mol. in vitro or mediator of the initiating stimulus of EPF in the bioassay.

L2 ANSWER 20 OF 32 CA COPYRIGHT 2003 ACS

TI Identification of molecules involved in the ' ***early***
 pregnancy ***factor*** ' phenomenon

AB An isolated prepn. from ovine placental exts. which was active in the rosette inhibition assay mimicking the activity of the so-called ***early*** ***pregnancy*** ***factor*** (EPF) has been shown to contain a 12 kDa polypeptide which could be partially resolved from low-mol.-wt. active moieties. N-Terminal amino acid sequence anal. of the polypeptide indicated that it was ovine thioredoxin, an identification confirmed by isolation and complete sequence anal. of the corresponding cDNA. The cDNA for human thioredoxin was expressed in Escherichia coli and the recombinant protein isolated and purified. Pure recombinant thioredoxin alone did not induce the expression of increased rosette inhibition titers (RITs) when tested in the rosette inhibition assay; but, when tested in combination with cell stimuli such as platelet-activating factor (PAF) or serum, it allowed the expression of increased RITs where none was achieved in its absence. Thioredoxin acted in the assay to reverse a refractory state normally induced by these stimuli, allowing lipoxygenase-dependent moieties also induced by the stimuli to exert their effects, resulting in the expression of increased RITs.

Antibodies to recombinant thioredoxin removed from pregnancy sera the capacity to induce increased RITs, i.e. to express EPF activity, thus establishing a role for thioredoxin or thioredoxin-like proteins and assocd. mols. in the mechanisms which allow pregnancy sera to induce increased RITs. Based on a consideration of these and other results, a new model for the study of the EPF phenomenon is presented and discussed.

L2 ANSWER 21 OF 32 CA COPYRIGHT 2003 ACS

TI Bovine ***early*** ***pregnancy*** ***factor*** (EPF) activity dependent on a 67-kDa polypeptide

AB Maternal bovine EPF activity can be reduced to 1 single polypeptide enriched and identified from serum of cows in early pregnancy. The relative mol. wt. of this active polypeptide was 67 kDa. This bovine EPF was labeled by ¹²⁵I and peroxidase. In parallel investigations of non-pregnant animals a 67-kDa polypeptide was addnl. identified in the last purifn. step, but without EPF activity in the rosette inhibition test. This indicated occurrence of an inactive precompound (or carrier protein) of the EPF in the non-pregnant state. On preincubation of lymphocytes with EPF analogs (inactive polypeptide from nonpregnancy serum) EPF retained its optimal activity, its lymphocyte receptors being

unaffected. Monoclonal ***antibodies*** produced against HPLC-enriched EPF were reactive to the 67-kDa polypeptide in pregnancy material as well as in nonpregnancy material and were not able to differentiate between pregnant and nonpregnant. A mouse anti-EPF serum produced against highly purified EPF isolated from SDS PAGE showed reactivity only against the 67-kDa polypeptide of pregnancy serum but not against that of non-pregnancy serum. This is the 1st evidence for a difference in antigenic determinants of the two 67-kDa proteins found in pregnancy and non-pregnancy serum. Furthermore, a 2nd higher mol. wt. protein could be identified by this antiserum in pregnancy and non-pregnancy serum.

L2 ANSWER 22 OF 32 CA COPYRIGHT 2003 ACS

TI ***Antibodies*** to ***early*** ***pregnancy*** ***factor*** retard embryonic development in mice in vivo

AB Passive immunization of mice against ***early*** ***pregnancy*** ***factor*** (EPF) leads to failure to maintain pregnancy. This treatment affects the development of the embryos very early in gestation. By Day 3, 54 and 25% of embryos treated with anti-EPF IgG and IgM, resp., had not developed to the 4-cell stage, compared with 12 and 1% in the control groups. None of the embryos in the mice treated with anti-EPF had developed beyond the 8-cell stage. A similar delay in the development after the treatment was obsd. on Day 4. The effect during the early stages of cleavage was indirect rather than direct, as 2-cell embryos (32-36 h post coitum) cultured in vitro in the presence of anti-EPF ***antibodies*** developed to the morula and blastocyst stage. The delay in development did not appear to be caused by a disruption of the normal pattern of circulating progesterone, as progesterone concns. on Day 4 were within the normal range.

L2 ANSWER 23 OF 32 CA COPYRIGHT 2003 ACS

TI Monoclonal ***antibodies*** to ***early*** ***pregnancy*** ***factor*** perturb tumor cell growth

AB The pregnancy-assocd. substance ***early*** ***pregnancy*** ***factor*** (EPF) has previously been reported as a product of tumors of germ cell origin. More recently EPF (or an EPF-related substance, tEPF) has also been detected in the serum of patients bearing tumors of non-germ cell origin. Here, the prodn. is reported of tEPF by a variety of cultured transformed and tumor cell lines, of both germ and non-germ cell origin. ***Antibodies*** specific for EPF remove all tEPF activity from tumor cell conditioned medium. tEPF prodn. is assocd. with cell division; tEPF is no longer detected after growth arrest or differentiation. Co-culture of tumor cells with increasing doses of anti-EPF monoclonal ***antibodies*** resulted in a significant, dose-dependent decrease in rate of growth and viability. Similar anti-EPF concns. have no effect on the ConA-induced proliferation of mouse spleen cells. Thus, tEPF is a growth-regulated product of cultured tumor and transformed cells. These cells are also dependent upon tEPF for continued growth, i.e. tEPF is acting in the autocrine mode.

L2 ANSWER 24 OF 32 CA COPYRIGHT 2003 ACS

TI Methods, ***antibodies***, and kits for immunochemical determination of normal or abnormal pregnancy

AB Methods, (un)labeled polyclonal and monoclonal ***antibody*** reagents, and kits are provided for the detection of normal or ectopic pregnancy, ex vivo products of conception, or increased risk of preterm labor and membrane rupture. Individual methods rely on the detn. of an unrestricted pregnancy antigen or the presence or absence of a fetal restricted antigen in a sample taken from the cervical canal, cervical os, or posterior fornix, or a sample expelled or removed from the uterus. Immunoassay procedures for the above detns. are described. The pregnancy antigen may be human chorionic gonadotropin, somatostatin, .alpha.-fetoprotein, etc. Pregnancy can be detd. in the 1st trimester or

in the 1st 20 wk. Swab samples collected in the vicinity of the cervical os were immersed in a diluent contg. 0.05M Tris-HCl (pH 7.4), 0.15M NaCl, 0.02% NaN₃, 1% bovine serum albumin, 500 kallikrein units/mL aprotinin, 1 mM phenylmethylsulfonyl fluoride, and 5 mM EDTA. Microtiter plate wells were reacted 1st with goat F(ab')₂ anti-mouse IgG ***antibody***, then with mouse monoclonal anti-(fetal fibronectin) ascites (prodn. and purifn. of monoclonal ***antibody*** given). A 100 .mu.L portion of each sample, std., pos. control (amniotic fluid of known fibronectin concn.), and neg. control (sample diluent) was placed in sep. wells and incubated for 2 h at room temp. Following washing, each well was further incubated with alk. phosphatase-conjugated goat anti-human fibronectin, then with enzyme substrate; developed color was read at 405 nm. A std. curve was constructed by correlating increasing reaction rate with increasing fibronectin concn. in the stds. Samples obtained before wk 20 of pregnancy which demonstrate significant fetal fibronectin in the test sample indicate normal uterine pregnancy; samples in which significant amts. of fetal fibronectin are absent indicate that normal uterine pregnancy is not present.

L2 ANSWER 25 OF 32 CA COPYRIGHT 2003 ACS

TI Detection of ***early*** ***pregnancy*** ***factor*** (EPF) in pregnant and nonpregnant subjects with the rosette inhibition test

AB The authors tested for ***early*** ***pregnancy*** ***factor*** (EPF) using a rosette inhibition test with polyclonal anti-lymphocyte serum from the horse and 2 monoclonal ***antibodies*** specific for the E-receptor of T-lymphocytes. When lymphocytes were preincubated with early human pregnancy sera, rosette inhibition titers were 4 or more dilns. higher than when lymphocytes were preincubated with nonpregnant sera.

L2 ANSWER 26 OF 32 CA COPYRIGHT 2003 ACS

TI Passive immunization of pregnant mice against ***early*** ***pregnancy*** ***factor*** causes loss of embryonic viability

AB ***Early*** ***pregnancy*** ***factor*** (EPF) is a monitor of the incidence of fertilization and the progress of the early embryo. To det. whether, as well as being a marker of embryonic viability, EPF is also necessary for embryonic survival, passive immunization studies with monoclonal and polyclonal ***antibodies*** to EPF were carried out on pregnant mice. In the prepn. of monoclonal ***antibodies***, it was noted that most anti-EPF producing hybridomas failed to grow in vitro, while those that did grow produced only low yields of specific IgM ***antibodies***. Two stable hybridoma cell lines were established bot producing low affinity anti-EPF IgM; polyclonal anti-EPF IgG was prepd. in rabbits. Mice were passively immunized with 500 .mu.g monoclonal anti-EPF IgM at 32 and 56 h post coitum (total dose 1 mg) or with 500 .mu.g monoclonal anti-EPF IgG at 8, 16, 32, and 40 h post column (total dose 2 mg). At 10 days, only 6/18 and 3/6 mice receiving monoclonal ***antibodies*** and 2/7 and 1/6 mice receiving polyclonal ***antibodies*** had maintained their pregnancies. In contrast, all mice receiving control IgM or control IgM and 22/23 receiving saline were still pregnant at day 10.

L2 ANSWER 27 OF 32 CA COPYRIGHT 2003 ACS

TI Neoplasm diagnosis and treatment, and pregnancy testing and termination, using ***antibodies*** to ***early*** ***pregnancy*** ***factor*** (EPF)

AB Monoclonal and polyclonal ***antibodies***, and active fragments thereof, to EPF can be used to identify tumor cells which produce EPF, for diagnosis and treatment of cancer, for detection of EPF in the serum during pregnancy, and for diagnosis and termination of pregnancy in mammals. Treatment of mouse fibrosarcoma MCA2 cells in vitro with monoclonal anti-EPF ***antibody*** 7/342 (.gtoreq.0.16 .mu.M) resulted in cell detachment, clumping, and killing. Mice inoculated with MCA2

cells and then treated with 500 .mu.g 7/342 daily for 4 days did not develop tumors.

L2 ANSWER 28 OF 32 CA COPYRIGHT 2003 ACS

TI ***Early*** ***pregnancy*** ***factor*** : large scale isolation of rosette inhibition test-active polypeptides from ovine placental extracts

AB Protocols are described for the isolation of substantial (mg) amts. of a rosette inhibition test (RIT)-active polypeptide fraction from ovine placental exts. The main component of the prepn. is a 12-kilodalton (K) polypeptide which contains a highly reactive thiol group. Oxidn. may occur during isolation with the result that the final prepn. is a mixt. of the 12K polypeptide and a 25K disulfide linked dimer. The highly reactive thiol group was directly involved in activity expression, since gentle redn. followed by iodoacetylation resulted in a complete loss of activity. Antisera were prepd. and the ***antibodies*** removed all the RIT activity from fresh ovine placental exts., indicating that mols. related to those in the isolated prepn. were responsible for all the activity in crude exts. The ***antibodies*** also removed all the RIT activity from ovine and murine pregnancy sera, obtained both before and after implantation. Since ***early*** ***pregnancy*** ***factor*** (EPF) is defined as an RIT activity detected in pregnancy serum, these results establish that EPF activity is due to mols. similar to those isolated from the placental exts. The availability of the preparative protocol and ***antibodies*** should hasten the biochem. definition of the EPF phenomenon.

L2 ANSWER 29 OF 32 CA COPYRIGHT 2003 ACS

TI Detecting ***early*** ***pregnancy*** ***factor*** (EPF) in mammals, purifying EPF and method for producing a monoclonal ***antibody***

AB Cells which produce EPF are grown in a culture medium to produce a supernatant medium contg. the EPF. To purify the EPF, the EPF is absorbed by a selective absorbent in a column, dialyzed against a buffer soln., concd. and gel-filtered. Selected fractions of the filtrate undergo reversed-phase HPLC, and the purified EPF is eluted from the chromatog. column. Monoclonal ***antibodies*** to EPF are produced to detect the presence of EPF in serum and to provide a means for detecting pregnancy in female mammals. An early pregnancy test kit is described. EPF is purified from human choriocarcinoma, myeloma, and lymphoblastic leukemic cells by immunoadsorption using goat/anti-mouse EPF on CNBr-activated Sepharose 4B, gel filtration on Sephacryl S-200, and reversed-phase HPLC on Beckman RPSC ultrapore. Spleen-myeloma hybrid cells from mice immunized with human EPF are selected for anti-EPF formation and cloned for monoclonal ***antibody*** manuf.

L2 ANSWER 30 OF 32 CA COPYRIGHT 2003 ACS

TI Improvement of the rosette inhibition test including some remarks on the possible mechanism of EPF in the RIT

AB The rosette inhibition test (RIT) for the detn. of ***early*** ***pregnancy*** ***factor*** (EPF) in human serum or urine was modified. The monoclonal ***antibody*** anti-HuLyl-3 was used in place of anti-lymphocyte sera, and rosette formation was evaluated after lymphocyte nuclei were stained with acridine orange. SEM studies did not show any differences in the surface charge of lymphocytes preincubated with control or pregnancy serum. However, transmission electron microscopic results did suggest a difference in surface charge and verified the general neg. charge of the lymphocyte surface.

L2 ANSWER 31 OF 32 CA COPYRIGHT 2003 ACS

TI ***Early*** ***pregnancy*** ***factor*** of human urine

AB ***Early*** ***pregnancy*** ***factor*** (EPF) from urine of women .ltoreq.28 wk pregnant was dialyzed and serially ultrafiltrated.

EPF was detected in the >50,000-dalton and 3500-10,000-dalton fractions. The low-mol.-wt.-fraction EPF was dialyzable, but when mixed with the 10,000-25,000-dalton fraction became nondialyzable. Thus, in pregnant urine EPF exists as a low-mol.-wt. entity bound to a larger carrier. Polyclonal antisera and monoclonal ***antibodies*** to EPF were prepd. and characterized.

L2 ANSWER 32 OF 32 CA COPYRIGHT 2003 ACS

TI Purification and partial characterization of EPF

AB ***Early*** ***pregnancy*** ***factor*** (EPF) was purified from the conditioned medium from the human choriocarcinoma cell line BeWo by immunoabsorption, gel filtration, and reverse-phase HPLC. Approx. 50 .mu.g EPF was obtained from 2 L of conditioned medium, and an overall purifn. factor of 2 .times. 105 was achieved. The human tumor EPF, which is a postimplantation EPF, consisted of a single peptide of 16,000 mol. wt. In spite of numerous differences between the human tumor EPF and that previously purified from mouse ovaries and oviducts, the human and mouse EPF were immunol. similar. Both exerted an inhibition of rosette formation, indicating the stimulation of release of lymphocyte suppressor factors. Also, the ***antibodies*** to mouse EPF bound to human EPF. In addn. to the above data, a review of the purifn. and properties of mouse ovary and oviduct EPF is given.

=> d all 7 13 14 29

L2 ANSWER 7 OF 32 CA COPYRIGHT 2003 ACS

AN 131:127375 CA

TI Method and apparatus for detecting conception in animals using

antibodies to ***early*** ***conception*** ***factor***

IN Jordan, Nancy Tommye; Jordan, John Douglas

PA Concepto Diagnostics, USA

SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM G01N033-543

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 13, 15

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9939208	A1	19990805	WO 1999-US2331	19990202
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2319417	AA	19990805	CA 1999-2319417	19990202
	AU 9925795	A1	19990816	AU 1999-25795	19990202
	EP 1053473	A1	20001122	EP 1999-905689	19990202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9908550	A	20001128	BR 1999-8550	19990202
	JP 2002502036	T2	20020122	JP 2000-529611	19990202
	US 2001024799	A1	20010927	US 2001-764826	20010117
PRAI	US 1998-16995	A	19980202		
	WO 1999-US2331	W	19990202		

AB The present invention provides ***antibodies*** which specifically

bind ***early*** ***conception*** ***factor*** , which can be found in body fluids of animals including but not limited to the cow, cat, dog, horse, human, sheep, and pig. The invention provides methods for detecting conception or the absence of conception in an animal, the latter being recognized by the absence of ***early*** ***conception*** ***factor*** in a suitable body fluid collected from the animal.

Apparatus for detecting ***early*** ***conception*** ***factor*** in a body fluid from an animal comprising the ***antibodies*** which specifically bind ***early*** ***conception*** ***factor*** are also provided.

ST ***early*** ***conception*** ***factor*** ***antibody*** app fertilization

IT Immunoglobulins
 RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (A, monoclonal, to ***early*** ***conception*** ***factor*** ; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Glycoproteins, specific or class
 RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (ECF (***early*** ***conception*** ***factor***); method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Immunoassay
 (app.; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Insemination, artificial
 (assay for ***early*** ***conception*** ***factor*** in humans and cows in relation to; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) (chimeric, to ***early*** ***conception*** ***factor*** ; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) (conjugates, to ***early*** ***conception*** ***factor*** , with detectable group; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Blood analysis
 Blood serum
 Body fluid
 Milk analysis
 Urine analysis
 (***early*** ***conception*** ***factor*** detection in; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Cat (Felis catus)
 Cattle
 Dog (Canis familiaris)
 Horse (Equus caballus)
 Sheep
 Swine
 (***early*** ***conception*** ***factor*** of; method and
 app. for detecting conception in animals using ***antibodies*** to
 early ***conception*** ***factor***)

IT Hybridoma
 (for monoclonal ***antibody*** prodn.; method and app. for
 detecting conception in animals using ***antibodies*** to
 early ***conception*** ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU
 (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical
 study); BIOL (Biological study); PROC (Process); USES (Uses)
 (humanized, to ***early*** ***conception*** ***factor*** ;
 method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); DEV (Device component use); SPN
 (Synthetic preparation); THU (Therapeutic use); ANST (Analytical study);
 BIOL (Biological study); PREP (Preparation); USES (Uses)
 (immobilized, to ***early*** ***conception*** ***factor*** ;
 method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT Animal
 Fertilization
 Immunoassay
 (method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU
 (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP
 (Preparation); USES (Uses)
 (monoclonal, conjugates, to ***early*** ***conception***
 factor , with colloidal gold; method and app. for detecting
 conception in animals using ***antibodies*** to ***early***
 conception ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR
 (Biological process); BSU (Biological study, unclassified); PRP
 (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL
 (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (monoclonal, to ***early*** ***conception*** ***factor*** ;
 method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT Membranes, nonbiological
 (nitrocellulose, with immobilized ***antibodies*** to ***early***
 conception ***factor*** ; method and app. for detecting
 conception in animals using ***antibodies*** to ***early***
 conception ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR
 (Biological process); BSU (Biological study, unclassified); THU
 (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP
 (Preparation); PROC (Process); USES (Uses)
 (to ***early*** ***conception*** ***factor*** ; method and

app. for detecting conception in animals using ***antibodies*** to
 early ***conception*** ***factor***)

IT 7440-57-5D, Gold, conjugates with ***antibody*** to ***early***
 conception ***factor*** , biological studies
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)
 (colloidal; method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT 9003-99-0D, Peroxidase, conjugates with ***antibody*** to
 early ***conception*** ***factor***
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)
 (horseradish; method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT 9004-70-0D, Nitrocellulose, with immobilized anti- ***early***
 conception ***factor*** ***antibodies***
 RL: DEV (Device component use); USES (Uses)
 (membrane; method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

IT 9001-78-9D, conjugates with ***antibody*** to ***early***
 conception ***factor*** 9002-13-5D, Urease, conjugates with
 antibody to ***early*** ***conception*** ***factor***
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical
 study); BIOL (Biological study); USES (Uses)
 (method and app. for detecting conception in animals using
 antibodies to ***early*** ***conception***
 factor)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) May; US 5602040 A 1997 CA

(2) Quinn, K; Cancer Immunology Immunotherapy 1992, V34, P265 CA

L2 ANSWER 13 OF 32 CA COPYRIGHT 2003 ACS

AN 121:26964 CA

TI Study of ***early*** ***pregnancy*** ***factor*** (EPF). 2

AU Ito, Kazue; Yasuda, Yasuhisa

CS Akita Prefect. Coll. Agric., Akita, 010-04, Japan

SO Chikusan no Kenkyu (1994), 48(5), 555-8

CODEN: CKNKAJ; ISSN: 0009-3874

DT Journal; General Review

LA Japanese

CC 2-0 (Mammalian Hormones)

AB A review, with 117 refs., on the prepn. of polyclonal and monoclonal
 antibodies specific for EPF for EIA, and hypotheses on the prodn.
 and action mechanism of EPF.

ST review ***early*** ***pregnancy*** ***factor*** action
 mechanism; ***antibody*** ***early*** ***pregnancy***

factor prepn review

IT ***Antibodies***

RL: SPN (Synthetic preparation); PREP (Preparation)

(to ***early*** ***pregnancy*** ***factor*** , prepn. of)

IT Glycoproteins, specific or class

RL: SPN (Synthetic preparation); PREP (Preparation)

(***early*** ***pregnancy*** ***factors*** ,
 antibody prepn. for and action mechanism of)

L2 ANSWER 14 OF 32 CA COPYRIGHT 2003 ACS

AN 120:319891 CA

TI Detection of bovine ***early*** ***pregnancy*** ***factor***
 (EPF) active polypeptide in different species of mammals

AU Klima, F.; Schadow, D.; Schroder, H. -D.; Pitra, Ch.
 CS Inst. Zoo and Wild Anim. Res., Berlin, Germany
 SO EOS--Rivista di Immunologia ed Immunofarmacologia (1993), 13(3-4), 189-92
 CODEN: EOSSDJ; ISSN: 0392-6699
 DT Journal
 LA English
 CC 13-1 (Mammalian Biochemistry)
 AB The authors studied the cross-reactivity between bovine ***early***
 pregnancy ***factor*** (EPF) and components in serum from
 females of 47 species by a monoclonal ***antibody*** (mab) capable of
 recognizing the EPF-active polypeptide in cattle to obtain data on the
 occurrence of an EPF system in mammals. Sera from 22 species were found
 to contain antigens that cross-reacted with mab against bovine EPF. They
 included 12 species of Bovidae, 4 of Cervidae, 1 Camelidae, 1 Suidae, 1
 Rhinocerotidae, 1 Tapiridae, and 2 Equidae. No cross-reactive antigens
 were found in 2 species of Felidae, 3 of Ursidae, 1 of Elephantidae, and 1
 of Hominidae. These results indicate the presence of the bovine
 EPF-active mol. in mammals other than Bovidae and support the assumption
 that EPF represents an early system in phylogenesis.
 ST ***early*** ***pregnancy*** ***factor*** mammal
 IT Mammal
 (***early*** ***pregnancy*** ***factors*** of)
 IT Glycoproteins, specific or class
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
 BIOL (Biological study); OCCU (Occurrence)
 (***early*** ***pregnancy*** ***factors*** , of mammals)

L2 ANSWER 29 OF 32 CA COPYRIGHT 2003 ACS

AN 107:20377 CA

TI Detecting ***early*** ***pregnancy*** ***factor*** (EPF) in
 mammals, purifying EPF and method for producing a monoclonal
 antibody

IN Morton, Halle; Cavanagh, Alice Christina; Rolfe, Barbara Ellen

PA University of Queensland, Australia

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

IC C07K015-06; C07K015-12; C07K003-20; C12N015-00

CC 9-3 (Biochemical Methods)

Section cross-reference(s): 15

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8605498	A1	19860925	WO 1986-AU60	19860312
	W: AU, GB, JP, US				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	AU 8655897	A1	19861013	AU 1986-55897	19860312
	AU 599021	B2	19900712		
	JP 62502304	T2	19870910	JP 1986-501847	19860312
	GB 2192634	A1	19880120	GB 1987-20636	19860312
	GB 2192634	B2	19900321		
	EP 262119	A1	19880406	EP 1986-901744	19860312
	R: AT, BE, CH, DE, FR, IT, LI, NL, SE				
PRAI	AU 1985-9664		19850312		
	AU 1985-9750		19850315		
	AU 1985-2402		19850912		
	WO 1986-AU60		19860312		

AB Cells which produce EPF are grown in a culture medium to produce a
 supernatant medium contg. the EPF. To purify the EPF, the EPF is absorbed
 by a selective absorbent in a column, dialyzed against a buffer soln.,
 concd. and gel-filtered. Selected fractions of the filtrate undergo
 reversed-phase HPLC, and the purified EPF is eluted from the chromatog.

column. Monoclonal ***antibodies*** to EPF are produced to detect the presence of EPF in serum and to provide a means for detecting pregnancy in female mammals. An early pregnancy test kit is described. EPF is purified from human choriocarcinoma, myeloma, and lymphoblastic leukemic cells by immunoadsorption using goat/anti-mouse EPF on CNBr-activated Sepharose 4B, gel filtration on Sephacryl S-200, and reversed-phase HPLC on Beckman RPSC ultrapore. Spleen-myeloma hybrid cells from mice immunized with human EPF are selected for anti-EPF formation and cloned for monoclonal ***antibody*** manuf.

ST ***early*** ***pregnancy*** ***factor*** human monoclonal
 antibody

IT Pregnancy
 (detection of, ***early*** ***pregnancy*** ***factor***
 purifn. and monoclonal ***antibody*** prepn. for)

IT Blood analysis
 Urine analysis
 (***early*** ***pregnancy*** ***factor*** detn. in, by
 immunoassay)

IT Myeloma
 (***early*** ***pregnancy*** ***factor*** of, of human,
 purifn. of and prepn. of monoclonal ***antibodies*** to, for
 pregnancy detection)

IT Carcinoma
 (chorio-, ***early*** ***pregnancy*** ***factor*** of, of
 human, purifn. of and prepn. of monoclonal ***antibodies*** to, for
 pregnancy detection)

IT Proteins, specific or class
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (***early*** ***pregnancy*** ***factors*** , purifn. of and
 prepn. of monoclonal ***antibodies*** to, for pregnancy detection)

IT Leukemia
 (lymphoblastic, ***early*** ***pregnancy*** ***factor***
 of, of human, purifn. of and prepn. of monoclonal ***antibodies***
 to, for pregnancy detection)

IT ***Antibodies***
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (monoclonal, to ***early*** ***pregnancy*** ***factor*** ,
 prepn. and use of, for pregnancy detection)

=> d his

(FILE 'HOME' ENTERED AT 18:59:48 ON 09 MAY 2003)

FILE 'CA' ENTERED AT 19:00:02 ON 09 MAY 2003

L1 132 S (EARLY PREGNANCY FACTOR?) OR (EARLY CONCEPTION FACTOR?)
 L2 32 S L1 AND ANTIBOD?

=> s l2 and urine

187346 URINE

L3 7 L2 AND URINE

=> d ti 1-7

L3 ANSWER 1 OF 7 CA COPYRIGHT 2003 ACS
 TI Bovine pregnancy test

L3 ANSWER 2 OF 7 CA COPYRIGHT 2003 ACS
 TI Method and apparatus for detecting conception in animals using
 antibodies to ***early*** ***conception*** ***factor***

L3 ANSWER 3 OF 7 CA COPYRIGHT 2003 ACS
 TI ***Early*** ***pregnancy*** ***factor*** has immunosuppressive

and growth factor properties

L3 ANSWER 4 OF 7 CA COPYRIGHT 2003 ACS
TI Neoplasm diagnosis and treatment, and pregnancy testing and termination,
using ***antibodies*** to ***early*** ***pregnancy***
factor (EPF)

L3 ANSWER 5 OF 7 CA COPYRIGHT 2003 ACS
TI Detecting ***early*** ***pregnancy*** ***factor*** (EPF) in
mammals, purifying EPF and method for producing a monoclonal
antibody

L3 ANSWER 6 OF 7 CA COPYRIGHT 2003 ACS
TI Improvement of the rosette inhibition test including some remarks on the
possible mechanism of EPF in the RIT

L3 ANSWER 7 OF 7 CA COPYRIGHT 2003 ACS
TI ***Early*** ***pregnancy*** ***factor*** of human
urine

=> d ab 7

L3 ANSWER 7 OF 7 CA COPYRIGHT 2003 ACS
AB ***Early*** ***pregnancy*** ***factor*** (EPF) from
urine of women .ltoreq.28 wk pregnant was dialyzed and serially
ultrafiltrated. EPF was detected in the >50,000-dalton and
3500-10,000-dalton fractions. The low-mol.-wt.-fraction EPF was
dialyzable, but when mixed with the 10,000-25,000-dalton fraction became
nondialyzable. Thus, in pregnant ***urine*** EPF exists as a
low-mol.-wt. entity bound to a larger carrier. Polyclonal antisera and
monoclonal ***antibodies*** to EPF were prepd. and characterized.

=> d all 7

L3 ANSWER 7 OF 7 CA COPYRIGHT 2003 ACS
AN 105:112770 CA
TI ***Early*** ***pregnancy*** ***factor*** of human
urine
AU Roberts, T. K.; Price, R.; Smart, Y. C.; Stevenson, K.; Tasevski, V.
CS Univ. Newcastle, 2308, Australia
SO Reproductive and Perinatal Medicine (1985), 1(Early Pregnancy Factors),
191-3
CODEN: RPMDER; ISSN: 0890-9989
DT Journal
LA English
CC 13-6 (Mammalian Biochemistry)
Section cross-reference(s): 9
AB ***Early*** ***pregnancy*** ***factor*** (EPF) from
urine of women .ltoreq.28 wk pregnant was dialyzed and serially
ultrafiltrated. EPF was detected in the >50,000-dalton and
3500-10,000-dalton fractions. The low-mol.-wt.-fraction EPF was
dialyzable, but when mixed with the 10,000-25,000-dalton fraction became
nondialyzable. Thus, in pregnant ***urine*** EPF exists as a
low-mol.-wt. entity bound to a larger carrier. Polyclonal antisera and
monoclonal ***antibodies*** to EPF were prepd. and characterized.
ST ***early*** ***pregnancy*** ***factor*** ***urine*** ;
antiserum ***early*** ***pregnancy*** ***factor***
urine ; ***antibody*** ***early*** ***pregnancy***
factor ***urine***
IT Pregnancy
(***early*** ***pregnancy*** ***factor*** of ***urine***

of women in, characterization of)

IT ***Urine***
 (***early*** ***pregnancy*** ***factor*** of, of women,
 characterization of)

IT Antiserums
 (to ***early*** ***pregnancy*** ***factor*** of
 urine of women, characterization of)

IT Proteins
 RL: PROC (Process)
 (***early*** ***pregnancy*** ***factors*** , of
 urine of women, characterization of)

IT ***Antibodies***
 RL: PROC (Process)
 (monoclonal, to ***early*** ***pregnancy*** ***factor*** of
 urine of women, characterization of)

=> s l2 and milk
 125255 MILK
 L4 2 L2 AND MILK

=> d all 1-2

L4 ANSWER 1 OF 2 CA COPYRIGHT 2003 ACS
 AN 138:300179 CA
 TI Bovine pregnancy test
 IN Roth, J. W.; Colgin, Mark; Hurst, Roger; Newman, Diane; Landmann, Cathy
 PA USA
 SO U.S. Pat. Appl. Publ., 22 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM G01N033-53
 ICS C12M001-34; A01K067-027
 NCL 436510000; 435287200; 800015000
 CC 9-16 (Biochemical Methods)
 Section cross-reference(s): 2, 13, 15

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003073248	A1	20030417	US 2002-255162	20020924
PRAI	US 2001-325663P	P	20010928		
	US 2001-337871P	P	20011108		
	US 2002-377165P	P	20020502		
	US 2002-377166P	P	20020502		
	US 2002-377355P	P	20020502		
	US 2002-377829P	P	20020502		
	US 2002-377921P	P	20020502		
	US 2002-377987P	P	20020502		
	US 2002-380042P	P	20020502		
	US 2002-380043P	P	20020502		

AB This invention provides bovine pregnancy test methods and devices. The test is also suitable for other ruminant and/or ungulate animals. Antigens from Group A (early pregnancy antigens), and/or Group B (mid-pregnancy antigens), and Group C (early, mid- and late pregnancy antigens) are detected in a fluid from the animal, and pregnancy is reliably detd. The pregnancy assays of this invention are preferably carried out using immunoassay devices which provide immediate results in the field.

ST cattle pregnancy test
 IT Antigens
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(1-8D; bovine pregnancy test)

IT Estrus
(Behavioral; bovine pregnancy test)

IT Glycoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Bovine antigen; bovine pregnancy test)

IT Chemokines
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(C-X-C, GCP-2 (granulocyte chemotactic protein 2); bovine pregnancy test)

IT Containers
(Cassette; bovine pregnancy test)

IT Animal
(Female; bovine pregnancy test)

IT Antigens
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Group A (early pregnancy); bovine pregnancy test)

IT Antigens
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Group B (mid-pregnancy); bovine pregnancy test)

IT Antigens
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Group C (early, mid-and late pregnancy); bovine pregnancy test)

IT Antigens
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(I-8U; bovine pregnancy test)

IT Transcription factors
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(IRF-2 (interferon regulatory factor 2); bovine pregnancy test)

IT Proteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(ISG17; bovine pregnancy test)

IT Transcription factors
RL: ANT (Analyte); ANST (Analytical study)
(ISGF-2 (interferon-stimulated gene factor 2); bovine pregnancy test)

IT Antigens
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Leu-13/9-27; bovine pregnancy test)

IT Proteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Mx; bovine pregnancy test)

IT Proteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Pregnancy serum protein 60; bovine pregnancy test)

IT Glycoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Pregnancy-assocd., PAG-1; bovine pregnancy test)

IT Glycoproteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(Pregnancy-assocd., PAG-4; bovine pregnancy test)

IT Glycoproteins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (Pregnancy-assocd., PAG-5; bovine pregnancy test)

IT Glycoproteins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (Pregnancy-assocd., PAG-6; bovine pregnancy test)

IT Glycoproteins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (Pregnancy-assocd., PAG-7; bovine pregnancy test)

IT Glycoproteins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (Pregnancy-assocd., PAG-9; bovine pregnancy test)

IT Proteins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (Pregnancy-specific protein B; bovine pregnancy test)

IT Analytical apparatus
 (Test strip; bovine pregnancy test)

IT Immunoassay
 (app.; bovine pregnancy test)

IT Alces alces
 Alpaca (animal)
 Animal
 Animal cell
 Antelope
 Bison
 Blood analysis
 Blood plasma
 Blood serum
 Body fluid
 Bos grunniens
 Breeding, animal
 Buffalo
 Camel (Camelus bactrianus)
 Camel (Camelus dromedarius)
 Caribou and Reindeer (Rangifer)
 Cattle
 Containers
 Cytolysis
 Dairy cattle
 Elk
 Filters
 Gazelle
 Giraffa camelopardalis
 Goat
 Horse (Equus caballus)
 Immobilization, molecular
 Immunoassay
 Labels
 Lama glama
 Milk analysis
 Ovarian cycle
 Ovis canadensis
 Pregnancy
 Ruminant
 Saliva
 Sheep
 Swine
 Test kits

Ungulate
 Urine analysis
 Vicugna vicugna
 (bovine pregnancy test)
 IT ***Antibodies***
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (bovine pregnancy test)
 IT Proteins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (***early*** ***pregnancy*** ***factors*** ; bovine
 pregnancy test)
 IT Temperature effects, biological
 (heat; bovine pregnancy test)
 IT ***Antibodies***
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (monoclonal; bovine pregnancy test)
 IT Eye
 Nose
 Vagina
 (secretions; bovine pregnancy test)
 IT Microglobulins
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (.beta.2-; bovine pregnancy test)
 IT 57-83-0, Progesterone, analysis 69106-44-1, 2',5' Oligoadenylate
 synthetase 329900-75-6, COX-2
 RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL
 (Biological study); USES (Uses)
 (bovine pregnancy test)
 L4 ANSWER 2 OF 2 CA COPYRIGHT 2003 ACS
 AN 131:127375 CA
 TI Method and apparatus for detecting conception in animals using
 antibodies to ***early*** ***conception*** ***factor***
 IN Jordan, Nancy Tommye; Jordan, John Douglas
 PA Concepto Diagnostics, USA
 SO PCT Int. Appl., 24 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM G01N033-543
 CC 9-1 (Biochemical Methods)
 Section cross-reference(s): 13, 15
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9939208	A1	19990805	WO 1999-US2331	19990202
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2319417	AA	19990805	CA 1999-2319417	19990202
	AU 9925795	A1	19990816	AU 1999-25795	19990202
	EP 1053473	A1	20001122	EP 1999-905689	19990202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9908550	A	20001128	BR 1999-8550	19990202

	JP 2002502036	T2	20020122	JP 2000-529611	19990202
	US 2001024799	A1	20010927	US 2001-764826	20010117
PRAI	US 1998-16995	A	19980202		
	WO 1999-US2331	W	19990202		

AB The present invention provides ***antibodies*** which specifically bind ***early*** ***conception*** ***factor***, which can be found in body fluids of animals including but not limited to the cow, cat, dog, horse, human, sheep, and pig. The invention provides methods for detecting conception or the absence of conception in an animal, the latter being recognized by the absence of ***early*** ***conception*** ***factor*** in a suitable body fluid collected from the animal.

Apparatus for detecting ***early*** ***conception*** ***factor*** in a body fluid from an animal comprising the ***antibodies*** which specifically bind ***early*** ***conception*** ***factor*** are also provided.

ST ***early*** ***conception*** ***factor*** ***antibody*** app fertilization

IT Immunoglobulins
 RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (A, monoclonal, to ***early*** ***conception*** ***factor***; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Glycoproteins, specific or class
 RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (ECF (***early*** ***conception*** ***factor***); method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Immunoassay
 (app.; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Insemination, artificial
 (assay for ***early*** ***conception*** ***factor*** in humans and cows in relation to; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) (chimeric, to ***early*** ***conception*** ***factor***; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT ***Antibodies***
 RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) (conjugates, to ***early*** ***conception*** ***factor***, with detectable group; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT Blood analysis
 Blood serum
 Body fluid
 Milk analysis

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Urine analysis
  ( ***early***      ***conception***      ***factor***      detection in;
    method and app. for detecting conception in animals using
      ***antibodies*** to ***early***      ***conception***
      ***factor*** )
IT Cat (Felis catus)
Cattle
Dog (Canis familiaris)
Horse (Equus caballus)
Sheep
Swine
  ( ***early***      ***conception***      ***factor*** of; method and
    app. for detecting conception in animals using ***antibodies*** to
      ***early***      ***conception***      ***factor*** )
IT Hybridoma
  (for monoclonal ***antibody*** prodn.; method and app. for
    detecting conception in animals using ***antibodies*** to
      ***early***      ***conception***      ***factor*** )
IT ***Antibodies***
RL: ARG (Analytical reagent use); BPR (Biological process); BSU
(Biological study, unclassified); THU (Therapeutic use); ANST (Analytical
study); BIOL (Biological study); PROC (Process); USES (Uses)
  (humanized, to ***early***      ***conception***      ***factor*** ;
    method and app. for detecting conception in animals using
      ***antibodies*** to ***early***      ***conception***
      ***factor*** )
IT ***Antibodies***
RL: ARG (Analytical reagent use); DEV (Device component use); SPN
(Synthetic preparation); THU (Therapeutic use); ANST (Analytical study);
BIOL (Biological study); PREP (Preparation); USES (Uses)
  (immobilized, to ***early***      ***conception***      ***factor*** ;
    method and app. for detecting conception in animals using
      ***antibodies*** to ***early***      ***conception***
      ***factor*** )
IT Animal
Fertilization
Immunoassay
  (method and app. for detecting conception in animals using
    ***antibodies*** to ***early***      ***conception***
    ***factor*** )
IT ***Antibodies***
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); THU
(Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP
(Preparation); USES (Uses)
  (monoclonal, conjugates, to ***early***      ***conception***
    ***factor*** , with colloidal gold; method and app. for detecting
    conception in animals using ***antibodies*** to ***early***
    ***conception***      ***factor*** )
IT ***Antibodies***
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR
(Biological process); BSU (Biological study, unclassified); PRP
(Properties); THU (Therapeutic use); ANST (Analytical study); BIOL
(Biological study); PREP (Preparation); PROC (Process); USES (Uses)
  (monoclonal, to ***early***      ***conception***      ***factor*** ;
    method and app. for detecting conception in animals using
      ***antibodies*** to ***early***      ***conception***
      ***factor*** )
IT Membranes, nonbiological
  (nitrocellulose, with immobilized ***antibodies*** to ***early***
    ***conception***      ***factor*** ; method and app. for detecting
    conception in animals using ***antibodies*** to ***early***
    ***conception***      ***factor*** )
IT ***Antibodies***

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RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (to ***early*** ***conception*** ***factor*** ; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT 7440-57-5D, Gold, conjugates with ***antibody*** to ***early*** ***conception*** ***factor*** , biological studies
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (colloidal; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT 9003-99-0D, Peroxidase, conjugates with ***antibody*** to ***early*** ***conception*** ***factor***
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (horseradish; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT 9004-70-0D, Nitrocellulose, with immobilized anti- ***early*** ***conception*** ***factor*** ***antibodies***
 RL: DEV (Device component use); USES (Uses)
 (membrane; method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

IT 9001-78-9D, conjugates with ***antibody*** to ***early*** ,
 conception ***factor*** 9002-13-5D, Urease, conjugates with ***antibody*** to ***early*** ***conception*** ***factor***
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
 (method and app. for detecting conception in animals using ***antibodies*** to ***early*** ***conception*** ***factor***)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

(1) May; US 5602040 A 1997 CA

(2) Quinn, K; Cancer Immunology Immunotherapy 1992, V34, P265 CA

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